

09/871,929

IBM/188

Remarks

The Examiner has rejected all claims as obvious in view of Taylor et al. 2004/0088384 combined with Narin et al. 6,691,176. Applicant respectfully submits this rejection is improper and should be withdrawn.

Claimed Inventions

The present invention is directed to the provision of a service at a client computer, in which the client may have different capabilities or management needs. The method involves delivering appropriate executable code from a server to the client, and/or the execution of appropriate code by the server. The method further involves management of executable code by the client.

Independent claims 1, 12 and 15 relate to a method in which a server will "identify[] factors relevant to provision of [an] information handling capability by [a] client computer", then the server will "select[] one of at least a first and a second service to be uploaded" (the services "comprising different executable code"), and finally, the server will "deliver[the] selected service to [the] client computer".

Independent claims 20, 31 and 34 relate to "performing an analysis of usage of said information handling capability by

09/871,929

IBM/189

said client computer system to determine whether said executable code ought to be retained in storage...".

Independent claims 39, 48 and 49, relate to "receiving from a server computer system, state information relating to a prior interaction of [a] client computer system and server computer system".

Independent claims 52, 61 and 62 relate to a server that will "select, in response to a request to provide an information handling capability by a client computer system, a service to be executed by said server computer system, from at least first and second services available to said server...", and then "executing ... code in [the] selected service."

Taylor

Taylor et al. is, at best, only marginally relevant to the present application. Taylor et al. discloses a "modular storage server architecture for retrieving data in response to user access requests. In particular, [Taylor] relates to a server architecture in which data is dynamically distributed over a plurality of disks, and data access requests are assigned to particular processors in order to provide good data access performance and server fault tolerance." Taylor, page 1, paragraph 0002.

09/871,929

IBM/188

Taylor has relevance to the present invention only in that Taylor's storage scheme might be usable to store information in a server of the kind that delivers executable code to clients. However, with respect to each of the claimed aspects outlined above, Taylor does not disclose the claimed concepts.

Narin

Narin discloses a web scripting service manager having several components that interoperate to provide enhanced functions to web pages with browser-brand independence. As best seen in Figs. 6A and 6B, these components include a browser scripting space, including a script wrapper 197, a connector object 194, a service manager 190, and various service objects.

In the Narin scheme, a browser on a client computer receives an HTML document and executes a script that is delivered with the HTML (as noted at col. 13, lines 25-31). The instructions of the script are browser-brand independent (see col. 7, lines 8-9). However, included within the script is a script wrapper 197, the function of which is detailed in Fig. 8A. As seen there, the script wrapper includes IF-THEN-ELSE, CASE, or SWITCH style logic statements that recognize the brand of the browser in use and activate a browser-brand-specific service request to a browser-brand-specific connector object. The connector objects are different for different browser brands; as

09/871,929

IBM/188

seen in Fig. 8A the connector object may be an ActiveX control (typical of Microsoft Internet Explorer) or a plug-in (typical of Netscape Navigator). The connector object delivers service requests to the service manager 190, which is browser-brand independent code providing additional functions for a web page (see col. 3, lines 55-57). The service manager also provides event management to deliver brand-independent events to the brand-specific connector object and from there to a brand-specific event handler in the script wrapper 197, as illustrated in Fig. 8B.

Narin indicates that this structure is to be preferred to the prior art because: (1) most of the script and the code of the service manager and service objects is brand-independent (see col. 7 lines 7-16), (2) the service objects may persist and maintain state from one browser session to another or from a session in one browser brand to a session in another browser brand (see col. 6 line 65 - col. 7 line 1), potentially reducing initialization time or bandwidth use, or potentially avoiding the need for a user to repeatedly log-in to a secure service (see col. 2 line 65 - col. 3 line 5). The service manager persists even when a browser is closed, for a predetermined time such as a half-hour as stated at col. 11, lines 1-3.

09/871,929

IBM/188

Independent Claims 1, 12 and 15

Comparing Taylor Narin to the language of the claims currently under rejection, a number of striking differences are evident.

First, with respect to claims 1, 12 and 15, these claims relate to a method performed "at a server", or to "a server" per se or a program product "for a server", in which the server will "identify[] factors relevant to provision of [an] information handling capability by [a] client computer", then "select[] one of at least a first and a second service to be uploaded" and finally, "deliver[the] selected service to [the] client computer". Neither Taylor nor Narin disclose anything like this.

The Examiner has cited to Page 8, paragraph 0077 of Taylor, which describes a server that may store "trick play", i.e., fast forward or rewind, video information, as well as normal "play" information. The Examiner apparently has cited this because it at least shows two types of information are delivered by the server to a client. However, as the Examiner admits, Taylor is not disclosing that different executable code is being delivered to a client, nor is Taylor disclosing selection between different executable code services based upon client factors.

09/871,929

IBM/188

The Examiner posits that these gaps are filled by Narin. But Narin does not disclose delivery of different code services either. Narin discloses that an adaptation to browser brand is made by coding the script delivered to the browser to include different functions for different brands, as is made clear by Fig. 8A of Narin. Narin, therefore, does not select or make any decisions at the server relating to browser brand, but provides "script wrapper" code that defers those decisions to be made by the client. Further, Narin downloads the same script for all brands; there is no "selecting" of a script to upload or "delivering" a selected script. Also, while Narin downloads different connector objects for different browser brands, there is nothing in Narin that suggests that the server selects which connector object to send to a client. Indeed, one stated intention of Narin is that a client could use "different browsers" (col. 6, lines 14-17 and col. 6 line 65 - col. 7 line 1); to facilitate this each of the available connector objects would need to be forwarded to the client - and obviously to do this the sever could not be selecting only one connector object to deliver.

A combination of Taylor and Narin would not, therefore, lead to the invention of independent claims 1, 12 and 15. At best, this combination would lead to the Narin common script

09/01, 929

IBM/188

being stored and delivered by the Taylor server, not the formation of and selection between more than one script, which neither reference suggests.

While these clear distinctions of independent claims 1, 12 and 15 obviate any possible rejection of claims 1-19, some additional comments on the Examiner's rejections of dependent claims are in order.

Regarding claims 3, 14 and 17, the Examiner has misstated the disclosure of Narin. There is no disclosure at col. 6 line 65 - col. 7 line 15 of a server using any factors to determine a service to upload, nor is there any disclosure of the particular factors of "operating system", "bandwidth", "date and/or time of day", "cost" or "location" - the only compability issue discussed by Narin is browser brand; and, browser brand differences are not handled by the server, as noted.

Regarding the Examiner's remarks on claims 4, 23, 40 and 53, and 5, 24, 41 and 54, Applicant is at a loss to find any discussion of brokerage information at Narin col. 7 lines 1-15 or col. 6, lines 65-67.

Regarding the Examiner's remarks on claims 6, 25, 42 and 55 and 7, 26, 43 and 56, and 8, 27, 44 and 57, Applicant cannot see any mention of real estate or chattel property, or an automobile, in Taylor at page 6, paragraph 0056.

09/871,929

IBM/188

Regarding the Examiner's remarks on claims 10, 29, 46 and 59, and 11, 30, 47 and 60, Applicant cannot see any mention of financial information or transportation service information in Taylor page 6, paragraph 0056.

Independent Claims 20, 31 and 34

Regarding claims 20, 31 and 34, the Examiner's rejection¹ is again based upon a combination of Narin and Taylor, relying upon that part of Narin at col. 9, lines 30-39 that states the function of a script wrapper, and relying upon Taylor for showing "performing an analysis of usage of said information handling capability by said client computer system to determine whether said executable code ought to be retained in storage...". Firstly, Narin clearly states that service manager 190 terminates based upon a thirty minute timer, not "based upon usage" as in the claimed approach. Second, Taylor at page 7, paragraph 0073 describes only storage management in a server, not in a client. Taylor simply does not relate to the claimed invention.

As this disposes of the Examiner's rejection of the independent claims 20, 31 and 34, all of claims 20-38 are clearly

¹The Examiner's paragraph 16 also identifies claim 52, but this is believed to be an error as 52 is more closely related to claims 61 and 62 which are addressed separately.

09/871,929

IBM/188

allowable. However, with respect to the Examiner's rejection of dependent claims 21, 32 and 35, and 22, 33 and 36, the Examiner again relies on Taylor's paragraph 0077 which does not relate to evaluating use/disuse or connectivity at a client computer, and thus these rejections are inappropriate.

Independent claims 39, 48 and 49

As to claims 39, 48 and 49, the Examiner's rejection relies again upon Narin's disclosure at col. 9, lines 30-39 of a "script wrapper" and its functions, and relies upon Taylor for disclosing "receiving from a server computer system, state information relating to a prior interaction of [a] client computer system and server computer system". While Narin does describe initializing an object that "needs to accumulate some state before it is operational" (col. 3, lines 2-3), there is no mention that this initializing process includes receiving "information relating to a prior interaction of [a] client computer system and server computer system"; rather, Narin's examples are "when connection to a server is required, when initialization procedures consume too much time, power or bandwidth, when user authentication via password is required." Furthermore, Taylor page 7, paragraph 0073 in no way relates to a

09/871,929

IBM/188

client's management of its states, but rather with the storage of data in primary or secondary storage of a server.

Narin and Taylor are thus clearly distinct from independent claims 39, 48 and 49, and Applicant submits that all of claims 39-51 are allowable.

Indepdnt Claims 52, 61 and 62

The Examiner's rejection of independent claims 52², 61 and 62 also rely upon Narin's discussion in column 9 of a "script wrapper", and upon Taylor. Narin does not disclose a server that will "select, in response to a request to provide an information handling capability by a client computer system, a service to be executed by said server computer system, from at least first and second services available to said server..." (Emphasis added). The concept of a server selecting what to execute is simply not found in Narin. As noted above with reference to Narin's Fig. 8A, a "script wrapper" is executed by the client and used to select which of two possible connector objects the client should execute, so that the client can subsequently execute a service object via a service manager. Clearly, there is no selection by

² Apparently claim 52 should have been analyzed by the Examiner along with claims 61 and 62.

09/871,929

IBM/188

the server of which service to execute. Indeed, a point of the Narin structure is to make the software, as much as possible, browser-brand independent, i.e., "[t]he developer of services thus only needs to provide the service itself in the form of a COM object without worrying about browser specific issues."

Taylor page 7, paragraph 0073 relates only to the management of data between primary and secondary storage on a server, not to selection and delivery of different services for a client.

As Narin and Taylor are thus clearly distinct from independent claims 52, 61 and 62, Applicant submits that all of claims 52-64 are allowable.

Conclusion

As this establishes the allowability of all claims, Applicant respectfully requests issuance of a Notice of Allowability.

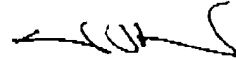
This response is believed to be timely. If, however, any petition for extension of time is necessary to accompany this communication, please consider this paper a petition for such an extension of time, and apply the appropriate extension of time fee to Deposit Account 23-3000. If any other charges or credits

09/871,929

IBM/188

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Respectfully submitted,



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